

WHAT IS CLAIMED IS:

1. A composite guidewire, comprising:

an elongated, flexible core formed from a nickel titanium alloy, said core having proximal and distal regions, with said distal region having a tapered portion;

5 a reinforcement tube disposed over said proximal region of said core; a primary coil disposed over said tapered distal region of said core; coating of a heat shrinkable material disposed over at least a portion of said reinforcement member, an intermediate portion of said core, and at least a portion of said primary coil; and

10 a distal tip secured to the distal end of said core.

2. The composite guidewire of Claim 1, wherein said elongated, flexible core comprises a rod.

3. The composite guidewire of Claim 1, wherein said elongated, flexible core comprises at least one strand.

4. The composite guidewire of Claim 1, wherein said elongated, flexible core comprises a hypo tube.

5. The composite guidewire of Claim 1, wherein said reinforcement tube comprises an elongated ground stainless steel hypo tube.

6. The composite guidewire of Claim 1, wherein said reinforcement tube comprises titanium.

7. The composite guidewire of Claim 1, wherein said reinforcement tube comprises a nickel titanium alloy.

8. The composite guidewire of Claim 1, wherein said reinforcement tube comprises a distal tapered portion.

9. The composite guidewire of Claim 1, wherein said coating of a heat shrinkable material comprises an elongated tube of polytetrafluoroethylene.

10. The composite guidewire of Claim 1, wherein said primary coil comprises at least one nickel titanium alloy strand.

11. The composite guidewire of Claim 1, wherein said primary coil comprises at least one platinum wire.

12. The composite guidewire of Claim 10, wherein said primary coil further comprises at least one platinum wire.

13. The composite guidewire of Claim 1, wherein said distal tip comprises platinum.

14. The composite guidewire of Claim 1, wherein said distal tip comprises tantalum filled epoxy.